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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/694,077	10/19/2000	Ilya Ravkin	VAI 301B	7890

7590 03/23/2007

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EXAMINER	
EPPERSON, JON D	

ART UNIT	PAPER NUMBER
1639	

MAIL DATE	DELIVERY MODE
03/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 09/694,077	**Applicant(s)** RAVKIN ET AL.	
	Examiner Jon D. Epperson	**Art Unit** 1639	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 10 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on *10 January 2007*. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: _____.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: Please see attached sheets.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

Advisory Action

1. Applicants' further request for reconsideration under 37 C.F.R. § 1.116 (e.g., see 4/15/2004 Response, pages 1-7) is herby denied because Applicants' arguments were found to be non-persuasive and thus would not place the application in condition for allowance (e.g., see below).

Maintained Rejections and/or Objections

Claim Rejections - 35 USC § 103

2. Claims 34, 36-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lam et al. (Lam, K. S.; Salmon, S. E.; Hersh, E. M.; Hruby, V. J.; Kazmierski, W. M.; Knapp, R. J. "A new type of synthetic peptide library for identifying ligand-binding activity" Nature **1991**, 354, 82-84) and Egner et al. (Egner, B. J.; Rana, S.; Smith, H.; Bouloc, N.; Freg, J. G.; Brocklesby, W. S.; Bradley, M. "Tagging in combinatorial chemistry: the use of coloured and fluorescent beads" Chem. Commun., **1997**, 735-736) and Lee (U.S. Patent No. 4,053,433) (Date of Patent is **1977**) and Blawas et al (Blawas, A.S.; Reicher, W. M. "Protein Patterning" Biomaterials **1998** *19*, 595-609) and Noonan et al (U.S. Patent No. 6,129,896) (Filing Date is **December 17, 1998**) and Walt (U.S. Patent No. 6,210,910) (Filed **March 2, 1998**).

For ***claims 34 and 41***, Lam et al. (see entire document) teach a method for identifying ligand-binding activity using a synthetic 'one-bead, one-peptide' approach (e.g., see abstract), which reads on the claimed invention. For example, Lam et al. disclose providing a first class of particles in a first reaction vessel and a second class of particles in a second reaction vessel wherein a first type of analyte is attached to said first

class of particles and a second type of analyte is attached to said second class of particles (e.g., see page 82, column 1, last paragraph, "The first cycle consisted of distributing a pool of resin beads into separate reaction vessels each with a single amino acid [i.e., different class of analyte]"; see also figure 1, wherein the first class = A, second class = G, etc. and each class is in its own reaction vessel; see also page 82, column 2, paragraph 3 describing formation of pentapeptide library with ~2,476,099 members). Lam et al. also disclose forming a mixture of particles from the first and second vessels, the mixture having substantially equal numbers of particles for each vessel (e.g., see figure 1, "randomization" step; see also page 82, column 1, last paragraph, "Our method involves creating a large peptide library ... representing the universe of possible random peptides in roughly equimolar proportion"). Lam et al. further disclose dispersing a portion of the mixture to an examination site on a surface, the particles of the first and second classes being distributed to random positions across the examination site (e.g., see figure 2; see also page 82, column 2, paragraph 1). Lam et al. further disclose reacting the portion of the mixture with a test substance such as a labeled antibody against β-endorphin or streptavidin (e.g., see Tables 1 and 2; see also figure 2). Lam et al. also disclose acquiring at least one image of particles at the examination site on the surface (e.g., see figure 2 showing low- and high-power photomicrographs).

For ***claims 39 and 46***, Lam et al. disclose covalent attachment of pentapeptide sequences (e.g., see figure 1; see also abstract).

For ***claims 40 and 47***, Lam et al. disclose a reaction step that occurs before the dispensing step (e.g., see Lam et al., page 82, column 2, paragraph 1, "Acceptor

molecules were ... added in soluble form to the peptide-bead library [i.e., before analysis]"). Also note that optimization of process steps, especially with respect to ordering, is within the routine skill of the art. *In re Burhans*, 154 F.2d 690, 69 USPQ330 (CCPA 1946) (selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results).

Lam et al. differ from the claimed invention as follows:

For ***claims 34 and 42***, Lam et al. fail to teach the use of a first and second optically detectable code to interpret the result of such a binding experiment. In addition, Lam et al. only teach the use instead labels such as alkaline phosphatase coupled with various sequencing techniques to identify pentapeptides that interact with the ligands. In addition, Lam et al. fail to teach at least one flat viewing surface and a shape that self-orients the viewing surface to face a viewing direction substantially perpendicular to the surface. Lam et al. only teach the use of round beads.

For ***claims 36 and 43***, Lam et al. fail to teach each particle has at least one transparent portion.

For ***claims 37 and 44***, Lam et al. fail to teach carriers as a combination of fused fibers of various colors, the colors and relative positions of the fibers indicating the code.

For ***claim 38 and 45***, Lam et al. fail to teach the attachment of biological cells to the particles for cell identification. The combined references of Lam et al. and Egner et al. only teach the use of peptides.

For ***claim 41***, Lam et al. fail to teach the additional steps of acquiring a set of images of particles at the examination site, each image corresponding to a different

spectral band and operating via the use of a computer program to identify particles of the same class by using the images to develop a mask for the particles of the same class, and detecting one or more reporting modalities within the mask. The combined references of Lam et al. and Egner et al. only disclose imaging different spectral bands and the use of filter masks (e.g., see Egner et al., figures 1 and 2), but the references is silent as to whether a "computer" program takes advantage of these measurements for identification.

However, the combined references of Lee, Egner et al., Blawas et al., Noonan et al., and Walt et al. teach the following limitations that are deficient in Lam et al. and Egner et al.:

For ***claims 34 and 42***, the combined references of Lee, Egner et al., Blawas et al., Noonan et al., and Walt et al. (see entire documents) teach the use of a first and second class of detectable codes to aid in the identification of a library of peptides bound to beads (e.g., see Egner et al., figures 1 and 4; see also Footnotes disclosing that various dyes can be used to label each "class" of library member, for example, pyrene butanoic acid = Val, methyl red = Ala, etc.). In addition, the combined references of Lee, Egner et al., Blawas et al., Noonan et al., and Walt et al. teach that the microcarriers can have generally a flat shape with two substantially parallel planar sides instead of the round shape of a bead (e.g., see Lee, figures 2-5 disclosing examples of a planar "top" and a planar "bottom" side that are substantially parallel and flat; see also lines 37-38 showing that these taggants are useful for producing "libraries" like the libraries disclosed by Lam et al.; see also Noonan et al, figures 3 and 4; see also column 2, lines 23-26; see also column 2, last three paragraphs, "Method 100 begins by synthesizing functional moieties

onto a plurality of fibers ... For example, functional moieties may include DNA oligonucleotides for DNA testing biosensor devices. Alternative, the functional moieties may include proteins, peptide, Antibodies"; see also figure 2; see also Blawas et al, pages 605-606, section 4.3, wherein Blawas et al disclose that bound proteins and/or antibodies can be used to control the areas of cell adhesion and/or growth to a substrate surface i.e., the cells bind to the proteins that are attached to the fused glass and/or plastic chips).

For ***claims 36 and 43***, the combined references of Lee, Egner et al., Blawas et al., Noonan et al., and Walt et al. teach a transparent portion (e.g., see Lee, column 3, lines 60-62, "A list of suitable colors may include: Clear").

For ***claims 37 and 44***, the combined references of Lee, Egner et al., Blawas et al., Noonan et al., and Walt et al. teach fused colored fibers wherein said fibers represent the code (e.g., see Lee, figures 2-5, see also column abstract, see also column 2, Summary of Invention, wherein the code is detectable on either planar side; see also column 4, lines 49-52, "A preferred type of color-coded microparticle ... consists of microscopic pieces of colored plastic films fused together to form a rectangular 'microsandwich'"; see also column 4, lines 46-48; see also, column 2, line 46 disclosing 233,846,052 uniquely coded batches of microcarriers; see also see figure 5 disclosing fused fibers).

For ***claims 38 and 45***, the combined references of Lee, Egner et al., Blawas et al., Noonan et al., and Walt et al. teach the attachment of biological cells to the particles for cell identification. For example, Noonan et al and Blawas et al teach the use of fused glass and/or plastic fibers can be cut into chips and used as biosensors to attach biological cells (e.g., see Noonan et al, column 2, lines 23-26; see also column 2, last three

paragraphs, "Method 100 begins by synthesizing functional moieties onto a plurality of fibers ... For example, functional moieties may include DNA oligonucleotides for DNA testing biosensor devices. Alternative, the functional moieties may include proteins, peptide, Antibodies"; see also Blawas et al, pages 605-606, section 4.3, wherein Blawas et al disclose that bound proteins and/or antibodies can be used to control the areas of cell adhesion and/or growth to a substrate surface i.e., the cells bind to the proteins that are attached to the fused glass and/or plastic chips).

For ***claim 41***, the combined references of Lee, Egner et al., Blawas et al., Noonan et al., and Walt et al. teach the use of a computerized sensor array for randomly detecting a mixed population of cells wherein each individual cell in the are is positioned in an optically addressable microwell (e.g., see Walt et al., abstract; see also column 5, lines 57 through column 6, line 20; see also column 7, lines 24-40; see also figures 1 and 3; see also column 12, lines 59-65). Each cell population is individually encoded with a single fluorophores or chromophore or ratios of such dyes like the as was disclosed by Egner et al. (e.g., see Walt et al., column 7, lines 24-40; column 15, lines 15 through column 20, lines 31; column 19, line 66 though column 20, line 11) and the identity and location of each cell type is determined by the characteristic optical response signature of the fluorophores or chromophore dye or ratios of such dyes (e.g., see Walt et al., column 15, lines 25-42; column 16, lines 18-26; column 20, lines 12-31). The type of cell includes adipocyte fat cells, neurons, and fibroblasts. The apparatus for the optical detection of the cells includes instruments such as epifluorescence microscope and CCD camera and the data is processed by a computer using an image processing software (e.g., see Walt et

al., column 26, lines 28-55).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to make to use the colored and fluorescently labeled beads as disclosed by Egner et al. to make the peptide library as disclosed by Lam et al. for the purposes of facile high throughput screening because Egner et al. explicitly state that their labeled beads were created for this purpose and further use the embodiments disclosed in the Lam et al. reference as an example (e.g., see Egner et al., page 736, paragraph bridging columns 1-2, "The use of colored and fluorescent beads has the potential, we believe, to simplify the identification of library members for single bead screening application"; see also page 735, column 1, paragraph 3, wherein the Lam et al. article is explicitly cited in footnote number 2). Furthermore, one of ordinary skill in the art would have been motivated to use the colored and labeled beads as taught by Egner et al. because according to Egner et al. it is a "simple" technique that is "non-destructive" and "very sensitive, with detection levels easily down to femtomoles of material/bead" (e.g., see Egner, et al., page 736, column 1, last paragraph). Furthermore, one of ordinary skill in the art would have reasonably expected to be successful because Egner et al. actually use the method of Lam et al. to synthesize their library (e.g., see Egner et al, page 735, column 1, paragraph 3 wherein the Lam et al. reference is cited for the library preparation in footnote 2).

In addition to the spherical beads disclosed by the combined teachings of Lam et al. and Egner et al. (as set forth above) other shapes and/or carriers (including carriers that have at least one flat viewing surface and a shape that self-orients the viewing

surface to face a viewing direction) would also have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made. For example, the combined references of Lee, Blawas et al., Noonan et al., and Walt et al. teach the use of various other carriers that were standard in the art at the time the invention was made including the use of flat fused fibers made of glass and/or plastic that will "self-orient" to place the flat surface in the viewing direction (e.g., see Lee, abstract expressly stating that their taggants can be used to label chemicals; see also figures 2-6; see also column 2, lines 37 and 38 wherein Lee expressly state that these taggants are useful for the production of "libraries", which would encompass the libraries produced by Lam et al.; see also column 1, lines 57 wherein the screening of "proteinaceous" materials is disclosed i.e., like the "proteinaceous" peptide libraries disclosed by Lam et al.; see also Noonan et al., figure 3; see also column 2, lines 60-63 stating that similar fused fibers can be used to "attach" a wide variety of ligands including proteins, antibodies, nucleic acids, etc.). Furthermore, a person of ordinary skill in the art would have been motivated to use the fused fibers as disclosed by the combined reference of Lee, Egner et al., Blawas et al., Noonan et al., and Walt et al. to replace the spherical carriers as disclosed by the combined teachings of Lam et al. and Egner et al. because Noonan et al., for example, state that these fused fiber carriers are easy to make, cheap to produce and can be monitored using "cleavable linkers" for better "quality control" (e.g., see Noonan et al., column 2, paragraph 1). In addition, Lee, demonstrates that an enormous number of codes can be generated using similar fused fibers (e.g., taggants), which is exactly what is required for labeling combinatorial libraries (e.g., see Lee, column 2, lines 22-23, see also lines 28-45, "The

improvement ... comprises providing microparticles ... [that] are encoded according to, a particular orderly sequence of visually color distinguishable dyed and/or pigmented layers ... For example, using a library of 12 colors in an eight-membered sequence, wherein no color is used adjacent to itself, the number of codes would be determined as follows ... this system includes 233,846,052 possible codes"). Finally, a person of skill in the art would reasonably have been expected to be successful because the combined references of Lee, Egner et al., Blawas et al., Noonan et al., and Walt et al. disclose that proteins, peptides, nucleic acids, and antibodies can all be easily attached to these carriers just like Lam et al. and Egner et al. demonstrated that peptides could be easily attached to the spherical beads (see Noonan et al., column 2, second to last paragraph; see also figure 2 showing standard synthesis procedures for connecting peptides, proteins, nucleic acids etc. to the glass, plastic, polymer, etc. solid supports). In addition, both Lee and Noonan et al. disclose the same bundled and/or fused fibers made of glass, plastic and/or polymers (e.g., see Noonan et al., abstract; see also Summary of the Invention disclosing fused and/or bundled fibers; see also claims 16 and 17 disclosing plastic and glass; see also Lee, Example 1 disclosing bundled and/or fused fibers; see also figures 1-6; see also column 4, last two paragraphs; see also column 3, lines 25-40 disclosing plastic and glass). Furthermore, both Lee, like Lam et al., also disclose the use of a microscope to analyze the carriers, which would encompass the microscopic techniques disclosed by the combined references of Egner et al. and Lam et al. (e.g., see Lee, column 1, line 32; see also Summary of the Invention). In addition, both Noonan et al. and Lam et al. indicate that peptides, proteins, antibodies and nucleic acids like RNA can be screened (e.g.,

compare Noonan et al., column 2, lines 59-61 to Lam et al., page 82, column 2, paragraph 1).

Furthermore, it would also have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to use the carriers, including fused glass and/or plastic fibers, as taught by the combined references of Lee, Lam et al., Egner et al. and Noonan et al. (see above), for the purpose of tagging cells because the combined references of Noonan et al., Blawas et al. and Walt et al., for example, explicitly state teach that fused glass fibers can be used for this purpose (e.g., see Noonan et al., abstract, column 2, Summary of the Invention; see also Blawas et al., page 605-606, section 4.3; see also Background of the invention and Table 1). A person of skill in the art would have been motivated to use the color coded fused glass and/or plastic as biosensors for detecting cells because Noonan et al., for example, explicitly state that the use of bundled fibers are a "preferred embodiment" (e.g., see column 2, paragraph 2, "the bonded fiber"; see also column 2, last two paragraphs, see also column 1, paragraph 2). Furthermore, Blawas et al. disclose that immobilized biomolecules can be beneficially used to monitor cell adhesion and/or growth (e.g., see entire document, especially, section 4.3 and figure 5). In addition, Walt et al. disclose that their sensors offer "distinct advantages" for high throughput screening of combinatorial libraries including the evaluation of hundreds of thousands of candidate compounds and, in addition, is particularly useful for screening cells using single or mixed dyes (e.g., see Walt et al., Summary of Invention). One of ordinary skill in the art would have reasonably expected to be successful because Blawas et al., Noonan et al. and Lee all separately disclose that fused glass and/or plastic can be

used to label cells (e.g., see Blawas et al., Table I, Substrate column; see also Noonan et al., column 3, line 1; see also Lee, column 4, line 51). Furthermore, a person of skill in the art would have reasonably expected to be successful using the sensor as disclosed by Walt et al. because Walt et al. teach that both single fluorophoric or chromophoric dye can be used for encoding the cells or, in an alternative embodiment, two or more encoding materials or dyes may be used to encode cell populations and the optical response intensity ratios for the dyes, produced by exposure to excitation light energy, are employed to encode and identify members of the cell population with the array, which would encompass the methods of Egner et al.

Response

3. Applicant's arguments directed to the above 35 U.S.C. § 103(a) rejection were fully considered (and are incorporated in their entirety herein by reference) but were not deemed persuasive for the following reasons.

[1] Applicants argue that the cited references (e.g., Lee, Noonan, Blawas, Walt) cannot be combined with Lam and, as such, do not teach the limitation wherein "each of the particles has at least one flat viewing surface and a shape that self-orients the viewing surface to face a viewing direction." (e.g., see 1/16/07 Response, pages 6-12). For example, Applicants argue, "It would be impossible to decode the Lee tag as it is described if analyte were attached to it. The analyte would interfere with the ability to decode using a microscope or magnifying device as suggested by Lee" (e.g., see 1/17/07 Response, paragraph bridging pages 8 and 9).

[1] The Examiner respectfully disagrees. Changing the shape from a "sphere" as

disclosed by Lam et al. and Egner et al. to a flat fused fiber bundle as disclosed by Lee would not interfere with the experiments as performed by Lam et al. and/or Egner et al. and Applicants have pointed to no evidence in support of this position. That is, the shape of the material does not interfere with the method of detection. If it did, Applicants' own method wouldn't work. Furthermore, references like Main et al. (e.g., see 8/11/06 Final Office action, page 19, proves that libraries were routinely synthesized using a wide variety of shapes).

[2] Applicants argue that no optically detectable code is set forth in Noonan (e.g., see 1/16/07 Response, page 9, bottom paragraph).

[2] In response to applicant's arguments against the Noonan reference individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Here, Lee and/or Egner, for example, teach an optically detectable code.

[3] Applicants argue that Blawas describes "significant problems" with all the described coupling chemistries used for protein attachment and, as a result, would not provide a reasonable expectation of success when considered "as a whole." (e.g., see 8/11/06 Response, pages 10 and 11).

[3] The Examiner respectfully disagrees. Both Lam et al. and Egner et al. disclose the facile synthesis of peptide libraries on a solid support. Noonan et al. also confirm this fact (e.g., see column 2, second to last paragraph; see also figure 2 disclosing standard synthesis procedures for connecting peptides, proteins, nucleic acids, etc. onto glass, plastic, polymers, etc.). Thus, a person of skill in the art could practice the coupling chemistry without undue

experimentation.

[4] Applicants argue that it unclear how an optic fiber containing a well could be distributed randomly on an examination surface (e.g., see 8/11/06 Response, paragraph bridging pages 11 and 12).

[4] The Examiner has never made such an assertion (see above) and, as a result, Applicants' arguments are moot. Walt was relied upon to show that the additional steps of acquiring a set of images of particles at the examination site, each image corresponding to a different spectral band and operating via the use of a computer program to identify particles of the same class by using the images to develop a mask for the particles of the same class, and detecting one or more reporting modalities within the mask as set forth in claim 41 (e.g., see rejection above).

[5] Applicants argue Egner does not disclose a flat shape with two substantially parallel planar sides and call on the Examiner to identify where such a limitation can be founding the reference.

[5] Again, the Examiner has never made an assertion that Egner discloses a flat shape with two substantially parallel sides. In fact, the Examiner has explicitly stated in the rejection that Egner et al. does not teach (by itself) a flat viewing surface (e.g., see page 9, last paragraph, "In addition to the spherical beads disclosed by the combined teaching of Lam et al. and Egner et al. (as set forth above) other shapes and/or carriers (including carriers that have at least one flat viewing surface ... would also have been prima facie obvious"). Thus, Applicants' arguments are moot. The Examiner notes that just because the "combined teachings" of various references set forth a limitation does not mean that each and everyone of those references must set forth

each and everyone of the limitations individually. In the present case, Lee, for example, clearly sets forth a flat shape.

[6] Applicants argue, "The office has pointed to nothing in any reference of record that teaches or suggests using the images to develop a mask for the particles of the same class, and detecting one or more reporting modalities within the mask" (e.g., see 1/16/06 Response, pages 12 and 13).

[6] The Examiner respectfully disagrees. The "filter masks" set forth in Egner et al., for example, were explicitly references (e.g., see above wherein figures 1 and 2 of Egner et al. were specified).

Accordingly, the 35 U.S.C. § 103(a) rejection cited above is hereby maintained.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon D Epperson whose telephone number is (571) 272-0808. The examiner can normally be reached Monday-Friday from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James (Doug) Schultz can be reached on (571) 272-0763. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JON EPPERSON
PRIMARY EXAMINER

Jon D. Epperson, Ph.D.
March 18, 2007